WHAT IS CLAIMED IS:

1. A payment process for transmission and/or service operations carried out within a data packet transmission network, during a session between a source unit and a destination unit interconnected via at least one node of said network, said destination unit and/or said at least one node being used by at least one operator and/or at least one service provider, said process being such that:

- in said source unit and/or in at least one node, called a credit node, a credit gateway assigns to each data packet sent by said source unit a payment token which has an initial value representing a credit of monetary units previously acquired from a toll center;

- in said destination unit and/or in at least one node, called a debit node, located downstream of said at least one credit node, a debit gateway modifies the payment token assigned to each data packet received, so as to reduce said initial value of the payment token, by an amount representing the cost of the operations to be carried out, for said received packet, by said destination unit and/or said at least one debit node;

- said destination unit and/or each debit node, in which is included a said debit gateway, receives from said toll center, for each packet received during said session, financial settlement of said representative amount;

characterised in that, between said source unit and said destination unit at least one node is used as a cache node, including cache means allowing at least one cache operation to be carried out, on behalf of at least one replaced unit or node, namely said destination unit and/or at least one node, located downstream of said at least one cache node,

in that said at least one cache node also behaves like a debit node, and includes a said debit gateway modifying the payment token assigned to each data packet received, so as to reduce said initial value of the payment token, by an amount representing the cost of said at least one cache operation carried out, for said packet received, by said cache node,

in that a manager of said at least one cache node:

- receives from said toll center, for each packet received during said session, said financial settlement of said representative amount and restores it to a manager of said at least one replaced unit or node,

- or allows a manager of said at least one replaced unit or node to receive said financial settlement directly.

2. A process according to claim 1, characterised in that at least one probe is placed upstream of said at least one cache node, making it possible to collect, in each packet reaching said at least one cache node, information relating to the amount representing the cost of said at least one cache operation to be carried out, for said packet, by said at least one cache node,

and in that said manager of said at least one replaced unit or node receives said information collected by said at least one probe, so as to get said amount representing the costs of the cache operations carried out by said at least one cache node for each packet received during said session.

3. A process according to claim 2, characterised in that said source unit is used by a provider of access to said data packet transmission network, and allows said access to be provided to at least one subscriber to said access provider.

4. A process according to claim 3, characterised in that each payment token is assigned to a given packet by insertion of said payment token in said packet and/or in at least one higher level encapsulating structure of said packet.

5. A process according to claim 4, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;

- and/or that said at least one probe has in fact transmitted to it said collected information.

6. A process according to claim 3, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;

- and/or that said at least one probe has in fact transmitted to it said collected information.

7. A process according to claim 2, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;

- and/or that said at least one probe has in fact transmitted to it said collected information.

8. A process according to claim 2, characterised in that each payment token is assigned to a given packet by insertion of said payment token in said

packet and/or in at least one higher level encapsulating structure of said packet.

9. A process according to claim 6, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;

- and/or that said at least one probe has in fact transmitted to it said collected information.

10. A process according to claim 2, characterised in that said data packet transmission network is a Internet type network.

11. A process according to claim 2, characterised in that said service operations belong to the group including:

- information data supply operations;
- video data supply operations;
- audio data supply operations;
- cartography data supply operations.

12. A process according to claim 1, characterised in that said source unit is used by a provider of access to said data packet transmission network, and allows said access to be provided to at least one subscriber to said access provider.

13. A process according to claim 12, characterised in that each payment token is assigned to a given packet by insertion of said payment token in said packet and/or in at least one higher level encapsulating structure of said packet.

14. A process according to claim 12, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;
- and/or that said at least one probe has in fact transmitted to it said collected information.

15. A process according to claim 1, characterised in that each payment token is assigned to a given packet by insertion of said payment token in said packet and/or in at least one higher level encapsulating structure of said packet.

16. A process according to claim 15, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said

manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;
- and/or that said at least one probe has in fact transmitted to it said collected information.

17. A process according to claim 1, characterised in that at least one session between said source unit and said destination unit is executed in a known way by said at least one replaced unit or node, so as to constitute a test session of said at least one cache node and/or of said at least one probe,

and in that said test session is such that, for each packet received during said test session, said manager of said at least one replaced unit or node can verify:

- that said manager of said at least one cache node has in fact restored to it or made it possible to receive directly said financial settlement;
- and/or that said at least one probe has in fact transmitted to it said collected information.

18. A process according to claim 1, characterised in that said data packet transmission network is a Internet type network.

19. A process according to claim 1, characterised in that said service operations belong to the group including:

- information data supply operations;
- video data supply operations;
- audio data supply operations;
- cartography data supply operations.

20. A payment system for transmission and/or service operations carried out within a data packet transmission network, during a session between a source unit and a destination unit interconnected via at least one node of said network, said destination unit and/or said at least one node being used by at least one operator and/or at least one service provider, said system being such that:

- said source unit and/or at least one node, called a credit node, includes a credit gateway making it possible to assign to each data packet sent by said source unit a payment token which has an initial value representing a credit of monetary units previously acquired from a toll center;

- said destination unit and/or at least one node, called a debit node, located downstream of said at least one credit node, includes a debit gateway making it possible to modify the payment token assigned to each data packet received, so as to reduce said initial value of the payment token, by an amount representing the cost of the operations to be carried out, for said received packet, by said destination unit and/or said at least one debit node;

- said destination unit and/or each debit node, in which is included a said debit gateway, receives from said toll center, for each packet received during said session, a financial settlement of said representative amount;

characterised in that, between said source unit and said destination unit at least one node, used as a cache node, includes cache means allowing at least one cache operation to be carried out, on behalf of at least one replaced unit or node, namely said destination unit and/or at least one node, located downstream of said at least one cache node,

in that, in order also to behave like a debit node, said at least one cache node includes a said debit gateway, allowing the payment token assigned to each data packet received to be modified so as to reduce said initial value of the payment token, by an amount representing the cost of said at least one cache operation carried out, for said packet received, by said cache node,

and in that a manager of said at least one cache node has:

- means for receiving on behalf of said toll center, for each packet received during said session, said financial settlement of said representative amount, and restitution means of said settlement to a manager of said at least one replaced unit or node;

- or means for communicating information to a manager of said at least one replaced unit or node, so that the latter directly receives said financial settlement.